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SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Trade name	: HYDROFAN MIX BASE
Product code	: LNHF0582

1.2 Relevant identified uses of the substance or mixture and uses advised against

Use of the Substance/Mixture	:	Paints, varnishes and enamels
Chemical nature	:	Mono compound enamel - finish coat

1.3 Details of the supplier of the safety data sheet

Company	:	Lechler SpA
		Via Cecilio 17
		22100 Como- CO-
Telephone	:	+39031586111
Telefax	:	+39031586206
E-mail address	:	safety@lechler.eu
Responsible/issuing person		

1.4 Emergency telephone number

Tel. +39-031-586301 - This telephone number is available during office hours only. (8.00-18.00)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008)

Skin sensitisation, Category 1 H317: May cause an allergic skin reaction.

2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)

Hazard pictograms



: H317

Signal word	:	Warning

Hazard statements

May cause an allergic skin reaction.

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Precautionary statements :	Prevention:	
	P261	Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.
	P272	Contaminated work clothing should not be allowed out of the workplace.
	P280	Wear protective gloves.
	Response:	
	P333 + P313	If skin irritation or rash occurs: Get medical advice/ attention.
	P362 + P364	Take off contaminated clothing and wash it before reuse.
	Disposal:	
	P501	Dispose of contents/ container to an approved waste disposal plant.

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Hazardous components which must be listed on the label:

- 2682-20-4 2-methylisothiazol-3(2H)-one
- 55965-84-9 reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)

2.3 Other hazards

None known. The information required is contained in this Material Safety Data Sheet.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Chemical nature

: Water pigmented dispersion

Hazardous components

Chemical name	CAS-No. EC-No. Registration number	Classification (REGULATION (EC) No 1272/2008)	Concentration [%]
2-butoxyethanol	111-76-2 203-905-0 01-2119475108-36	Acute Tox. 4; H302 Acute Tox. 4; H332 Acute Tox. 4; H312 Skin Irrit. 2; H315 Eye Irrit. 2; H319	>= 1 - < 10
N-methyl-2-pyrrolidone	872-50-4 212-828-1 01-2119472430-46	Skin Irrit. 2; H315 Eye Irrit. 2; H319 Repr. 1B; H360D STOT SE 3; H335 ***	>= 0,1 - < 0,3
2-dimethylaminoethanol	108-01-0 203-542-8	Flam. Liq. 3; H226 Acute Tox. 4; H302	>= 0,1 - < 1

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	01-2119492298-24	Acute Tox. 3; H331 Acute Tox. 4; H312 Skin Corr. 1B; H314 STOT SE 3; H335	
2-methylisothiazol- 3(2H)-one	2682-20-4 220-239-6	Acute Tox. 3; H301 Acute Tox. 2; H330 Acute Tox. 3; H311 Skin Corr. 1B; H314 Eye Dam. 1; H318 Skin Sens. 1A; H317 Aquatic Acute 1; H400 Aquatic Chronic 1; H410 (Acute M=10) (Chronic M=1)	>= 0,0015 - < 0,0025
reaction mass of 5- chloro-2-methyl-2H- isothiazol-3-one and 2- methyl-2H-isothiazol-3- one (3:1)	55965-84-9	Acute Tox. 3; H301 Acute Tox. 2; H330 Acute Tox. 2; H310 Skin Corr. 1C; H314 Eye Dam. 1; H318 Skin Sens. 1A; H317 Aquatic Acute 1; H400 Aquatic Chronic 1; H410 (Acute M=100) (Chronic M=100)	>= 0,0002 - < 0,0015

For the full text of the H-Statements mentioned in this Section, see Section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

General advice	 When symptoms persist or in all cases of doubt seek medical advice. Never give anything by mouth to an unconscious person.
If inhaled	 Remove to fresh air. Keep patient warm and at rest. If breathing is irregular or stopped, administer artificial respiration. If unconscious, place in recovery position and seek medical advice.
In case of skin contact	 Take off all contaminated clothing immediately. Wash skin thoroughly with soap and water or use recognized skin cleanser. Do NOT use solvents or thinners. Put shower on working place
In case of eye contact	 Irrigate copiously with clean, fresh water for at least 10 minutes, holding the eyelids apart. Seek medical advice. Put eye-washer on working place Remove contact lenses.
If swallowed	: If accidentally swallowed obtain immediate medical attention.

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Revision Date 28.04.2020 Do NOT induce vomiting.

DO NO I	induce	vomiting
Keep at	rest.	

4.2 Most important symptoms and effects, both acute and delayed

Symptoms	: No information available.
Risks	: No information available.

4.3 Indication of any immediate medical attention and special treatment needed

Treatment	: The first aid procedure should be established in consultation
	with the doctor responsible for industrial medicine.
	Seek medical advice.

SECTION 5: Firefighting measures

5.1 Extinguishing media

media

Suitable extinguishing media	 Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide. Keep containers and surroundings cool with water spray.
Unsuitable extinguishing	: Do NOT use water jet.

5.2 Special hazards arising from the substance or mixture

	Specific hazards during firefighting	 As the product contains combustible organic components, fire will produce dense black smoke containing hazardous products of combustion (see section 10). Exposure to decomposition products may be a hazard to health. Cool closed containers exposed to fire with water spray. Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.
5.3	Advice for firefighters	

Special protective equipment	:	Wear self-contained breathing apparatus for firefighting if
for firefighters		necessary.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions	: Use personal protective equipment.
	Ventilate the area.
	Refer to protective measures listed in sections 7 and 8.
	Material can create slippery conditions.

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6.2 Environmental precautions

Environmental precautions : Try to prevent the material from entering drains or water courses. If the product contaminates rivers and lakes or drains inform respective authorities.

6.3 Methods and materials for containment and cleaning up

Methods for cleaning up	: Clean with detergents. Avoid solvents.
	Contain spillage, and then collect with non-combustible
	absorbent material, (e.g. sand, earth, diatomaceous earth,
	vermiculite) and place in container for disposal according to
	local / national regulations (see section 13).

6.4 Reference to other sections

Refer to section 15 for specific national regulation.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Advice on safe handling	: Avoid exceeding the given occupational exposure limits (see section 8).
	Use only in area provided with appropriate exhaust ventilation. Avoid contact with skin, eyes and clothing.
	Smoking, eating and drinking should be prohibited in the
	application area. Avoid inhalation of vapour or mist.
	For personal protection see section 8.
	Thoroughly mix before using
	After using, store in a well-sealed container

7.2 Conditions for safe storage, including any incompatibilities

	Requirements for storage : areas and containers		Observe label precautions. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Store in accordance with the particular national regulations. Store between 5° an 35°C in a dry, well ventilated place away from source of heat, ignition and direct sunlight. No smoking. Electrical installations / working materials must comply with the technological safety standards.
1	Advice on common storage		Keep away from oxidizing agents and strongly acid or alkaline materials.
	German storage class	-	10 Combustible liquids
7.3 S	Specific end use(s)		

: This information is not available.

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SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Components	CAS-No.	Value	Control parameters	Update	Basis	
2-	111-76-2	TWA	20 ppm	2000-06-16	2000/39/EC	
butoxyethanol			98 mg/m3			
Further information	: skin: Ident	ifies the poss	sibility of significant u	ptake through the skinli	ndicative	
		STEL	50 ppm	2000-06-16	2000/39/EC	
			246 mg/m3			
Further information	: skin: Identifies the possibility of significant uptake through the skinIndicative					
1-methyl-2- pyrrolidone	872-50-4	TWA	10 ppm 40 mg/m3	2009-12-19	2009/161/EU	
Further information	: skin: Ident	: skin: Identifies the possibility of significant uptake through the skinIndicative				
		STEL	20 ppm 80 mg/m3	2009-12-19	2009/161/EU	
Further information	: skin: Ident	ifies the poss	sibility of significant u	ptake through the skinli	ndicative	

DNEL

: End Use: Workers N-methyl-2-pyrrolidone Exposure routes: Dermal Potential health effects: Long-term systemic effects Value: 4,8 mg/kg End Use: Workers Exposure routes: Inhalation Potential health effects: Long-term systemic effects Value: 14,4 mg/m3 End Use: Workers Exposure routes: Inhalation Potential health effects: Long-term local effects Value: 40 mg/m3 PNEC N-methyl-2-pyrrolidone : Fresh water Value: 0,25 mg/l Marine water Value: 0,025 mg/l Fresh water sediment Value: 1,42 mg/kg Marine sediment

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	Value: 0,142 mg/kg	
	Soil Value: 0,138 mg/kg	
	Sewage treatment plant Value: 10 mg/kg	
8.2 Exposure controls		
Personal protective equipme	ent	
Respiratory protection	: Apply technical measures to com- exposure limits. This should be achieved by a goo practically feasible- by the use of If the occupational exposure limits exceptional cases suitable respira worn only for a short period of tim Respirator with combination filter 141)	od general extraction and -if a local exhaust ventilation. s cannot be met, in atory equipment should be le.
Hand protection	 Latex gloves For prolonged or repeated contact Protective gloves complying with Please observe the instructions re- breakthrough time which are provided gloves. Also take into consideration conditions under which the product danger of cuts, abrasion, and the If used in solution, or mixed with of conditions which differ from EN 33 the CE approved gloves. Barrier creams may help to protect they should however not be applied occurred. Skin should be washed after cont Wash your hands and put on barr 	EN 374. egarding permeability and rided by the supplier of the on the specific local ct is used, such as the contact time. other substances, and under 74, contact the supplier of ct the exposed areas of skin, ed once exposure has act.
Eye protection	: Chemical resistant goggles must Ensure that eyewash stations and the workstation location.	
Skin and body protection	: Skin should be washed after cont Wear suitable protective clothing.	act.
Environmental exposure co	ntrols	
General advice	 Try to prevent the material from e courses. If the product contaminates rivers respective authorities. 	-

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance	: liquid
Odour	: solvent-like
Flash point	: > 63 - 100 °C
Ignition temperature	: not determined
Lower explosion limit	: No data available
Upper explosion limit	: No data available
Auto-ignition temperature	: Not applicable
рН	: not determined
Freezing point	: Not applicable
Boiling point	: not determined
Vapour pressure	: 1,000 hPa at 50 °C
Density	: 1,0141 g/cm3
Water solubility	: not determined
Partition coefficient: n- octanol/water	: No data available
Solubility in other solvents	: not determined
Flow time	: 50 s 6 mm Method: ISO/DIN 2431
Relative vapour density	: Not applicable
Evaporation rate	: not determined
9.2 Other information	
Solids by weight	: 17,76 %
Volatile organic compounds (VOC) content	: 7,03 %

(VOC) content		
Water content	:	75,19 %

SECTION 10: Stability and reactivity

10.1 Reactivity

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None reasonably foreseeable.

10.2 Chemical stability

The product is chemically stable.

10.3 Possibility of hazardous reactions

Hazardous reactions	:	No dangerous reaction known under conditions of normal use.
10.4 Conditions to avoid		
Conditions to avoid	:	Our products were manufactured in compliance with safety standards to avoid decomposition and degrading under the defined conditions. Taking the product type into account, it is advisable to leave the product in its original packaging thus avoiding transferring it.
10.5 Incompatible materials		

Materials to avoid : Keep away from oxidizing agents, strongly alkaline and strongly acid materials in order to avoid exothermic reactions.

10.6 Hazardous decomposition products

Hazardous decomposition products	: Carbon dioxide (CO2), carbon monoxide (CO), oxides of nitrogen (NOx), dense black smoke.
Thermal decomposition	: Not applicable

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Product		
Acute oral toxicity	:	Acute toxicity estimate: > 2.000 mg/kg, Calculation method
Acute inhalation toxicity	:	Acute toxicity estimate: > 20 mg/l, 4 h, vapour, Calculation method
Acute dermal toxicity	:	Acute toxicity estimate: > 2.000 mg/kg, Calculation method
Skin corrosion/irritation	:	Repeated or prolonged contact with the mixture may cause removal of natural fat from the skin resulting in desiccation of the skin., The product may be absorbed through the skin.
Further information	:	The concentration of each substance should be borne in mind in assessing the toxicological effects deriving from the preparation.
Components:		
N-methyl-2-pyrrolidone : Acute oral toxicity	:	LD50: 4.150 mg/kg, Rat(male and female), OECD Test
······································	•	Guideline 401

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Acute inhalation toxicity	: LC50: > 5,1 mg/l, 4 h, Rat, OECD Te	st Guideline 403
Acute dermal toxicity	: LD50: > 5.000 mg/kg, Rat, OECD Te	st Guideline 402
2-dimethylaminoethanol : Acute oral toxicity	: LD50: 1.183 mg/kg, Rat, OECD	Test Guideline 401
Acute inhalation toxicity	: LC50: 5,9 mg/l, 4 h, Rat, OECD Test	
Acute dermal toxicity	: LD50: 1.219 mg/kg, Rabbit, OECD Te	est Guideline 402

SECTION 12: Ecological information

12.1 Toxicity

Toxicity to fish	:	Remarks: No data is available on the product itself.
Toxicity to fish N-methyl-2-pyrrolidone	:	LC50: > 500 mg/l Exposure time: 96 h
2-methyl-2H-isothiazol-3-on 5-Chloro-2-methyl- 3(2H)isothiazolone mixt. witl 2-Methyl-3(2H)isothiazolone		Species: Oncorhynchus mykiss (rainbow trout) 10 100
		atic invertebrates (Chronic toxicity) NOEC: 12,5 mg/l Exposure time: 21 d Species: Daphnia magna (Water flea) Method: OECD Test Guideline 211
12.2 Persistence and degradability		
Biodegradability	:	No data available
12.3 Bioaccumulative potential		
Bioaccumulation	:	No data available
12.4 Mobility in soil Mobility	:	No data available

12.5 Results of PBT and vPvB assessment

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This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

12.6 Other adverse effects

Additional ecological information	 The product contains dangerous substances for the environment (see chapter no 3). The concentration of each substance should be borne in mind in assessing the toxicological effects deriving from the preparation.
	proparation

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product	 The product should not be allowed to enter drains, water courses or the soil. Disposal together with normal waste is not allowed. Special disposal required according to local regulations.
Contaminated packaging	 Empty containers should be taken to an approved waste handling site for recycling or disposal. According to the European Waste Catalogue, Waste Codes are not product specific, but application specific. The Waste code should be assigned in discussion between the user, the producer and the waste disposal company. The following Waste Codes are only suggestions: 150110*

SECTION 14: Transport information

14.1 UN number

Not regulated as a dangerous good

14.2 Proper shipping name

ADR

Not dangerous goods

IMDG

Not dangerous goods

IATA

Not dangerous goods

14.3 Transport hazard class(es)

Not regulated as a dangerous good

14.4 Packing group

Not regulated as a dangerous good

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14.5 Environmental hazards

ADR

Not dangerous goods

IMDG

Not dangerous goods

IATA

Not dangerous goods

14.6 Special precautions for user

Not applicable

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not applicable for product as supplied.

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

REACH - Candidate List of Substances of Very High	This product contains substances of very high concern (Regulation (EC) No 1907/2006 (REACH), Article 57).
Concern for Authorisation	
(Article 59).	

872-50-4	N-methyl-2-pyrrolidone
REACH - List of substances subject to authorisation (Annex XIV)	: Not applicable
REACH - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, preparations and articles (Annex XVII)	: 3
REACH - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, preparations and articles (Annex XVII)	: Banned and/or restricted
872-50-4	N-methyl-2-pyrrolidone

Regulation (EC) No 649/2012 : Not applicable of the European Parliament and the Council concerning the export and import of

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dangerous chemicals		
MAL-Code-Number	: 1-3 (1993) 224-m3 air/10 g	
Storage class (TRGS 510)	: 10: Combustible liquids	
Risk classification according to VbF	: Flash Point > 55 °C up to 100 °C, at water	15 °C not miscible with
Water contaminating class (Germany)	 slightly hazardous to water Ordinance on facilities for handling su hazardous to water (AwSV) Classification according to AwSV, An 	

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006. Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures

15.2 Chemical safety assessment

No data is available on the product itself.

SECTION 16: Other information

Full text of H-Statements referred to under sections 2 and 3.

H226	Flammable liquid and vapour.
H301	Toxic if swallowed.
H302	Harmful if swallowed.
H310	Fatal in contact with skin.
H311	Toxic in contact with skin.
H312	Harmful in contact with skin.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H330	Fatal if inhaled.
H331	Toxic if inhaled.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H360D	May damage the unborn child.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.

List of references

Regulation of the European Parliament and Council Regulation (EC) No 1272/2008 on classification, labeling and packaging of substances and mixtures (CLP)

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Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC (Official Journal of the European Union L 396 from 30.12.2006, as amended). Regulation (EU) No 528/2012 of the European Parliament and of the Council of 22 May 2012 concerning the making available on the market and use of biocidal products This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

Key or legend to abbreviations and acronyms used in the safety data sheet

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - European Agreement concerning the International Carriage of Dangerous Goods by Road; AICS - Australian Inventory of Chemical Substances; ASTM - American Society for the Testing of Materials; bw - Body weight: CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN -Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECHA - European Chemicals Agency; EC-Number - European Community number; ECx -Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS -Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx -Concentration associated with x% growth rate response; GHS - Globally Harmonized System; GLP -Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO -International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; NO(A)EC -No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RID -Regulations concerning the International Carriage of Dangerous Goods by Rail; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; SVHC - Substance of Very High Concern; TCSI - Taiwan Chemical Substance Inventory; TRGS - Technical Rule for Hazardous Substances; TSCA - Toxic Substances Control Act (United States); UN - United Nations; vPvB - Very Persistent and Very Bioaccumulative

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.